
Final

Finding of Suitability to Transfer Former Hamilton Army Airfield POL Hill

Prepared for
Department of the Army



October 2003

CH2MHILL

2485 Natomas Park Drive, Suite 600
Sacramento, California 95833

FINDING OF SUITABILITY TO TRANSFER
Former Hamilton Army Airfield
POL Hill Parcel
October 2003

1. PURPOSE

The purpose of this Finding of Suitability to Transfer (FOST) is to document the environmental suitability of the property, Petroleum, Oil, and Lubricant (POL) Hill, at the former Hamilton Army Airfield (HAAF) for transfer to the City of Novato, California for recreation/open space consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 120(h) and Department of Defense (DOD) policy. In addition, the FOST identifies use restrictions as specified in the attached Environmental Protection Provisions necessary to protect human health and the environment after such transfer.

2. PROPERTY DESCRIPTION

The POL Hill Parcel property (also known as Outparcel A-1) consists of 7.84 acres. Five former buildings/structures and one current building are/were associated with this property. The buildings and structures are identified in Table 1 below. Site maps of the property are attached (see Figures 1 and 2 in Enclosure 1). An approximately 2 -acre portion of the POL Hill Parcel is located within the buffer zone for Landfill 26. The Army will retain title to this 2-acre portion of the POL Hill Parcel (within the buffer zone for Landfill 26) (see Figure 2) until such time as the Title for the Landfill is transferred. Therefore, the portion of the POL Hill Parcel that will be transferred in the near future consists of only 5.67 acres of the 7.84-acre POL Hill Parcel. Although the timing for transfer of the 2-acre portion of the POL Hill Parcel within the buffer zone may differ from the rest of the property, documentation for the transfer of the entire POL Hill Parcel (including the portion within the buffer zone for Landfill 26) is included in this FOST. The entire 7.84-acre parcel has been deemed suitable for transfer. Depending on the context, the term POL Hill Parcel in this document may refer to the entire 7.84-acre parcel or to the 5.67-acre portion which will be transferred.

TABLE 1
List of Past and Present Structures at POL Hill Parcel

Building/ Structure	Year Built	Area (ft ²)	Historical Use/Status
715	Late 1950s	Not Known	Listed as a "POL Stg Office" (may have been guard shelter according to information obtained in interviews). Removed by IT Corporation during remediation of the POL Hill Parcel between 1986 & 1991.
717	Late 1950s	Not Known	Water Separator House and Water Control Pit - Listed as "Pump Stn LF" (liquid fuel) and a Water Reservoir. These structures were located on top of tank farm. Demolished by IT Corporation in 1986 during tank removals, investigation, and remediation of the POL Hill Parcel.
736 ¹	Late 1950s	1,496	Historically the "POL Fuel Management Office." Demolished in 1993 prior to construction of Landfill 26 groundwater treatment plant.
737 ¹	Late 1950s	800	Historically a "POL Storage Building." Last used for temporary storage of waste oil. Demolished in 1993 prior to construction of Landfill 26 groundwater treatment plant.
738 ¹	Late 1950s	2,596	Historically a maintenance building. Last used as a maintenance garage. Demolished in 1993 prior to construction of Landfill 26 groundwater treatment plant.
NA	1993	3,812	Groundwater treatment system for Landfill 26 (LF 26). The treatment system located in the building currently is not operational.

TABLE 1

List of Past and Present Structures at POL Hill Parcel

Building/ Structure	Year Built	Area (ft ²)	Historical Use/Status
Stairway	Late 1950s	~210	Two flight wooden stairway between AST-2 area and tank farm area. Currently use of stairs impaired by bushes.
Ramp	Late 1950s	~128	Truck loading/unloading dock and ramp made of concrete.
Former JP-4 Pumps	Late 1950s	396, 200, 81, 120	Liquid fuel pumps (labeled LF Pumps). Removed in 1986 and 1990 by IT Corporation during tank removals, investigations, and remediations of the POL Hill Tank Farm Area.
Fuel Pipelines	Late 1950s	NA	Buried and aboveground JP-4 fuel pipelines with diameters ranging from less than 2 inches to 10 inches. Most removed in 1986; additional piping removed in 1990 and 1997.

¹The Environmental Assessment (EA) prepared by USACE March 1995 indicates buildings 736, 737 and 738 were built after 1950.

ft² square feet

NA Not applicable

3. ENVIRONMENTAL CONDITION OF THE PROPERTY

A determination of the environmental condition of the property has been made based on the following documents: (1) Final Community Environmental Response Facilitation Act (CERFA) Report, prepared for the Hamilton Army Airfield by Tetra Tech, dated April 1994; (2) Environmental Baseline Survey (EBS) for Hospital Hill and POL Hill prepared by CH2M HILL, dated November 2001; (3) the Baseline Human Health Risk Assessment, prepared by Engineering Science, Inc. (ESI), dated July 1993; (4) the Environmental Assessment for the Closure and Realignment of Hamilton Army Airfield, prepared by Jones and Stokes Associates, Inc., dated September 1991; (5) the Environmental Impact Statement for Hamilton Army Airfield Disposal and Reuse, prepared by the U.S. Army Corps of Engineers (USACE) with assistance from Jones and Stokes Associates, Inc., dated January 1995; (6) the Environmental Assessment, Remedial Work on BRAC Property, prepared by USACE, dated March 1995; (7) Investigation of Asbestos and Polychlorinated Biphenyls Buildings 736, 737, and 738 U.S. Army Reserve Center Hamilton Army Airfield Novato, California, by Harding Lawson Associates (HLA), dated October 8, 1991; (8) Final Closure and Post Closure Maintenance Plan, Hamilton Army Airfield Landfill 26 prepared by CH2M HILL, dated June 1999; (9) U.S. Department of Defense Program Base Realignment and Closure Ordnance, Ammunition and Explosives Archive Search Report Findings Hamilton Army Airfield Marin County, California prepared by U.S. Army Corps of Engineers (USACE) – St. Louis District, dated September 2001; (10) Groundwater Monitoring Report August 2002 POL HILL, Hamilton Army Airfield Novato, California prepared by SOTA Environmental Technology Inc., dated September 26, 2002, (11) Draft Closure Report, POL Hill Outparcel, Hamilton Army Airfield, prepared by CH2M HILL, dated April 2003, (12) Draft POL Hill AST-2 Area Corrective Action Plan, prepared by CH2M HILL, dated February 2003, (13) Petroleum Oil and Lubrication (POL) Area Corrective Action Plan/Preliminary Endangerment Assessment (CAP/PEA) for the BRAC Property, Hamilton Army Airfield prepared for the US Army Corps of Engineers by IT Corporation, August 1997, (14) Correspondence dated June 8, 1998 regarding “the most recent data package from the POL Hill Site” from Mr. Randall W. Hanna, Hamilton BRAC Environmental Coordinator to Mr. Ray Leclerc, Department of Toxic Substances Control; (15) California Environmental Protection Agency, Department of Toxic Substances Control (DTSC), Letter to U.S. Army concerning regulation of petroleum hydrocarbons, Petroleum Oil and Lubrication (POL) Area Corrective Action Plan/Preliminary Endangerment Assessment and June 8, 1998 Data Submittal, Base Realignment And Closure (BRAC) Property, Hamilton Army Airfield, California from Mr. Ray Leclerc to Mr. Randal Hanna, dated July 3, 1998, (16) Petroleum, Oil, and Lubricant Outparcel

Closure Report prepared by IT Corporation, dated December 1999, (17) Unpublished project notes, logs, and laboratory data from Remedial Action Landfill 26 Phase I contract with Environmental Health, Research, and Testing, Inc. (EHRT)– 1993 through 1995, (18) USACE “Environmental Assessment Remedial Work on BRAC Property” dated November 1994, (19) Correspondence dated April 22, 2003 regarding “Approval of the Human Health Risk Assessment regarding Volatile Organic Compounds (VOCs) in Soil Gas Near Hamilton Army Airfield Landfill 26, dated December 2002, Novato, California” from Ms. Theresa McGarry, Department of Toxic Substances Control, to Mr. Jim McAlister, USACE, (20) 1992 Explanation of Significant Difference (ESD), (21) California Integrated Waste Management Board, Letter to U.S. Army concerning FOST for Parcel POL Hill, dated June 18, 2003, (22) Human Health Risk Assessment (HHRA) for Volatile Organic Compounds in Soil Gas Near Hamilton Army Airfield Landfill 26, December 2002, prepared by CH2M HILL, (23) Workplan for Landfill 26 Buffer Zone/Hamilton Meadows Additional Soil Gas Investigation, Hamilton Army Airfield, prepared by ITSI in August 2001, (24) Appendix D, Workplan Addendum for Landfill 26 Buffer Zone/Hamilton Meadows Additional Soil Gas Investigation, Hamilton Army Airfield, prepared by ITSI in October 2001, and (25) Corrective Action Work Plan, Hamilton Army Airfield, GSA Phase I Sale Area, Revision 1, prepared by Woodward-Clyde Federal Services in 1995.

The information provided is a result of a complete search of agency files during the development of these environmental surveys.

3.1 Environmental Condition of Property Categories

The property is Category 2 under the Department of Defense Environmental Condition of Property (ECP) Categories. A description of the ECP Categories is provided in Enclosure 2.

3.2 Storage, Release, or Disposal of Hazardous Substances

There is no clear evidence that hazardous substances were stored, released, treated, or disposed at the POL Hill Parcel in excess of the reportable quantities and periods listed in 40 CFR Part 373. The USACE “Environmental Assessment Remedial Work on BRAC Property” dated November 1994 documents that “there were vacant buildings which were used for vehicle maintenance and temporary storage of waste oil prior to removal by a refuse company.” Other labels on drums found at Building 737 in 1991 indicate other products were stored. In the Harding Lawson Associates (HLA) 1991 Investigation of Asbestos And Polychlorinated Biphenyls, Buildings 736, 737, and 738, U. S. Army Reserve Center, HLA reported, “Forty 55-gal drums were observed in an open area of the building [Building 737]. Some of the drums were labeled “oil”, “hydraulic oil”, “waste oil”, and “waste solvent.” Others were not labeled. All appeared to be empty. Three cylinder-type transformers were also observed. The transformers had been placed in metal or plastic containers.” Four 55-gallon drums labeled as containing PCBs were observed in a closed area of the building [Building 737]. All the drums were removed from the building in 1993 before the start of the EHRT Remedial Action, Landfill 26, Phase 1 contract (CH2M HILL, 2001). Accordingly, there is a need for notification of hazardous substance storage. There is no evidence of releases, treatment or disposal on site in excess of reportable quantities (RQs). However, it has been assumed that these materials were stored in quantities above RQs so Table E3-1 has been provided as required. Table E3-1 (Enclosure 3) provides a listing of known hazardous substance storage. Hazardous substance storage operations no longer occur at the POL Hill Parcel.

The California Department of Toxic Substances Control (DTSC) reviewed the BRAC POL Area Corrective Action Plan/Preliminary Endangerment Assessment dated August 1997 and a data report dated June 8, 1998, and determined that the only contamination at the POL Hill Parcel site is related to petroleum fuel (DTSC, 1998).

3.3 Petroleum and Petroleum Products

3.3.1 Underground and Above-Ground Storage Tanks (UST/AST)

There were 21 underground and 5 aboveground storage tanks (UST/AST) on the property that were used for storage of petroleum products; the storage tanks were removed from the property in 1986 and 1990. AST-2 was an 840,000-gallon JP-4 jet fuel aboveground storage tank formerly located on the upper hillside bench of the POL Hill Parcel. Twenty 25,000-gallon JP-4 jet fuel USTs were formerly located in the lower tank farm area at the base of the hill. A gravity-fed pipeline connected AST-2 to the lower tank farm area. Five additional storage tanks were located at the POL Hill Parcel, a 25,000-gallon tank that stored “mogas” (automobile fuel) and later JP-4 jet fuel, and a 20,000-gallon AST that stored JP-4 jet fuel. A 750-gallon JP-4 UST was also located in the tank farm area near the fuel pump house and a 650-gallon AST labeled “flammable” with a NFPA 704 flammable liquid placard and a 2,500-gallon AST labeled “diesel fuel” were located east of Buildings 737 and 738. Petroleum product releases to soil and groundwater occurred in areas where aboveground or underground storage tanks were located, along transfer pipelines and where drums of waste oil were stored at the POL Hill Parcel. TPH-contaminated soil at concentrations greater than 100 milligrams per kilogram (mg/kg) was excavated to the extent possible (down to bedrock) from the areas of the former AST-2, at the tank farm, at the gravity-fed pipeline, and near former Buildings 736, 737, and 738.

Monitoring wells were installed at the POL Hill Parcel to investigate groundwater contamination (CH2M HILL, 2001). Historically, contaminated groundwater was detected in monitoring wells in the vicinity of AST-2 and near the former tank farm. Currently groundwater contamination is only detected in the vicinity of AST-2. The Army has proposed natural attenuation and monitoring as the final remedy for addressing the TPH-contaminated groundwater beneath the former location of AST-2. The Army is currently working with the lead regulatory agency, the Regional Water Quality Control Board, San Francisco Bay Region (RWQCB), to complete a corrective action plan for the groundwater contamination at the former AST-2 Area and a closure report for all other site features.

A summary of the petroleum product activities is provided in Table E3-2 – Notification of Petroleum Products Storage, Release, or Disposal (Enclosure 3).

3.3.2 Non-UST/AST Storage, Release, or Disposal of Petroleum Products

No storage of petroleum products in containers other than tanks is known to have occurred at the POL Hill Parcel. Storage of mixtures of petroleum-based substances, such as hydraulic oil and waste oil, and other hazardous substances, such as waste solvents and PCBs, are described in sections 3.2 and 3.4 of this document.

3.4 Polychlorinated Biphenyls (PCB) Equipment

Building 737 was reported to contain empty drums labeled PCBs as well as transformers (HLA, 1991). In 1990, transformers were removed from the POL Hill Parcel tank farm soil remediation area and were stored in Building 737 prior to its demolition in 1993.

Seven transformers (B7, B8, B9, C1, C2, C3, and H9) and six electrical switches were removed from the POL Hill Parcel under a Presidio of San Francisco contract prior to the construction of the Landfill 26 groundwater treatment plant. The construction removed “all evidence” of the transformers and switches except for Transformer H9. Transformer H9 was located on a concrete slab within a fenced enclosure. There was no evidence of leakage from the transformer (CH2M HILL, 2001).

As part of the EBS, staff from the Hamilton Army BRAC Office conducted a visual inspection on September 7, 2000 to assess the condition of transformer H9 located in the fenced area on the ridge to the south of the former tank farm at the POL Hill Parcel. Three cells that could have been step down transformer banks were visible inside the transformer box. Each cell had windings of cloth. The transformer was observed to be a dry cell type of

transformer (i.e., no cooling oil used). The transformer is located on a pad that appeared to support footings for a former light standard (CH2M HILL, 2001).

In 1991, HLA conducted an investigation of PCBs at Buildings 736, 737, and 738. The findings of this investigation are summarized below:

Building 736

In 1991, HLA noted that none of the light ballasts in the building were labeled non-PCB. No other electrical equipment or PCB issues were identified by HLA. This building was removed during construction of the Landfill 26 groundwater treatment plant (CH2M HILL, 2001).

Building 737

No light ballasts or other suspect electrical equipment were observed. Forty 55-gallon drums labeled hydraulic oil, waste oil, waste solvent, and other drums not labeled were observed in the building by HLA; all appeared empty. Three cylinder-type transformers were observed in the building also. The transformers had been placed in metal or plastic containers. Four 55-gallon drums labeled as containing PCBs were observed. The area in which the containers were located was bermed with an 8-inch concrete berm and a 12-inch spill trench. This building was removed during construction of the Landfill 26 groundwater treatment plant. The containers in the building were removed prior to demolition (CH2M HILL, 2001).

Building 738

In 1991, HLA noted that none of the light ballasts in Building 738 were labeled non PCB. HLA noted some may contain PCBs; however, none were leaking. No other suspect electrical equipment was identified by HLA. This building was removed during construction of the Landfill 26 groundwater treatment plant (CH2M HILL, 2001).

3.5 Asbestos

Based on the Occusaft 1989 Asbestos Survey for HAAF and the 1991 Investigation of Asbestos and Polychlorinated Biphenyls report by HLA, asbestos-containing material (ACM) was found in the following POL Hill Parcel buildings: Buildings 715, 736, and 738. The ACM included floor tiles, thermal insulation, ceiling tiles, and roofing material. ACM was not identified in Building 737 at that time. Later, ACM was identified in insulation paper at Building 737 before demolition of the building. Marcor, the abatement contractor, completed the removal work in July and early August of 1993 (Unpublished files, 1993). All ACM was removed from Buildings 715, 736, 737, 738 and other buildings near Landfill 26. Therefore, ACM currently does not pose a threat to human health or the environment because all asbestos that posed an unacceptable risk to human health was removed prior to the demolition of the buildings. There are no known releases of asbestos to the environment at the POL Hill Parcel.

3.6 Lead-Based Paint

Based on the age (constructed prior to 1978) of former Buildings 715, 717, 736, 737, and 738 and a stairway, these structures are presumed to have contained lead-based paint (LBP). The buildings were demolished and removed from the POL Hill Parcel, while the stairway remains. No former (Army) residential areas are included in the Property. Since no future residential reuse is anticipated, no soil sampling was performed to identify the potential presence of lead-based paint in the soil. However, because of the possibility that lead-based paint may be contained in the soil, the POL Hill Parcel will be subject to notice and restricted from residential reuse, until the soil is tested for the presence of lead-based paint, and if present, it is abated according to state and federal regulations. See Enclosure 5.

3.7 Radiological Materials

There is no evidence that radioactive material or sources were used or stored on the POL Hill Parcel.

3.8 Radon

A radon survey has not been conducted on HAAF Base Realignment and Closure (BRAC) property. Interviews with HAAF personnel, a review of applicable environmental documents, and adjacent property radon survey results indicate that radon is not a concern at HAAF. Test data and survey results for the adjacent Navy property (housing) indicated radon below U.S. Environmental Protection Agency (USEPA) recommended action levels of 4 picocuries per liter (pCi/L). Information provided by U.S. Geologic Survey representatives indicate that radon is not found in the region due to the geology of the area. Therefore, radon is not considered to be an environmental concern at HAAF.

3.9 Unexploded Ordnance

Based on a review of existing records and available information, none of the former buildings or land within the POL Hill Parcel are known to have contained unexploded ordnance (USACE, 2001).

3.10 Other Hazardous Conditions

Due to the POL Hill Parcel's location, to the south and east of and adjacent to Landfill 26, a portion of the POL Hill Parcel lies within the buffer zone for the landfill. Methane gas has been detected in perimeter landfill gas monitoring probes located within the landfill buffer zone. While it is unclear if the methane gas was generated by the landfill, there is still the potential landfill gas could migrate offsite onto the POL Hill Parcel. In addition, groundwater beneath the landfill may become contaminated with hazardous constituents that leach from the landfill. Groundwater generally flows south to north under the landfill and around the POL Hill Parcel area. However, impacted groundwater from the landfill may migrate beyond the landfill boundary but generally in the direction away from the POL Hill Parcel.

There are several existing Regional Water Quality Control Board Orders (i.e., WDR 96-113, CAO 01-139, and TSO 01-140) that affect both the landfill site and the buffer zone. In addition, the groundwater treatment plant falls within the domain of these orders. While the groundwater extraction and treatment system has never been operated beyond initial startup, Order No. 96-113 specifically requires that the groundwater extraction well system and groundwater treatment plant be maintained so that they can be operated as needed.

A more detailed description of conditions at Landfill 26 is provided below.

3.11 Adjacent Hazardous Conditions

Based on the land use surrounding the POL Hill Parcel, Landfill 26 is the only area of concern with respect to the potential presence and migration of contaminants to the POL Hill Parcel. Landfill 26 has been inactive since 1974, when Hamilton was listed as surplus property and was officially closed in 1995 following a Record of Decision (ROD) signed in August 1989. Based on the alternative selected in the ROD and a 1992 Explanation of Significant Difference (ESD), a modified remedy consisting of a RCRA-type landfill cap was designed and constructed (CH2M HILL, 2001). A 150- to 200-foot buffer zone was established around the perimeter of the landfill, which extends into the westernmost portion of the POL Hill Parcel. No permanent structures or activities that would alter surface water flow to the landfill are permitted in this buffer zone.

In addition, Title 27 of the California Code of Regulations, Section 21190, Postclosure Land Use, requires that "All proposed postclosure land uses, other than non-irrigated open space, on sites implementing closure or on closed sites shall be submitted to the EA (Enforcement Agency), RWQCB (Regional Water Quality Control Board), local air district and local land use agency. The EA shall review and approve proposed postclosure land uses if the project involves structures within 1,000 feet of the disposal area, structures on top of waste, modification of the low permeability layer, or irrigation over waste." Title 27 further requires that all on-site construction within 1,000 feet of the boundary of any disposal area be designed and

constructed to prevent gas migration into the building unless an exemption has been issued. The building must be designed and constructed with an impermeable layer to landfill gas, a permeable gas collection layer with vent piping, automatic methane gas sensors both within the gas collection layer and inside the building, or an approved equivalent system. In addition, periodic monitoring must be conducted inside both buildings and underground utilities to monitor for potential migration of landfill gas. These requirements apply to structures built on landfill property, and do not pertain to adjacent properties. However, construction within 1,000 feet of the landfill will need to comply with Title 27 requirements (CIWMB, 2003).

Several existing Regional Water Quality Control Board Enforcement Orders (i.e., WDR 96-113, CAO 01-139, and TSO 01-140) pertain to activities at or adjacent to the landfill. Order No. 96-113 requires that groundwater, adjacent geologic units, and adjacent properties be protected from migration of wastes and pollutants, as well as maintenance of the groundwater extraction well system and groundwater treatment plant at the landfill so it may be operated in the event pollutants are detected in the groundwater.

According to the Final Environmental Baseline Survey for Hospital Hill and POL Hill, prepared in November 2001, data are available for Landfill 26 from a variety of studies and investigations performed since 1995 (CH2M HILL, 2001). Groundwater has been monitored at the landfill under an approved monitoring program since 1993 in accordance with RWQCB waste discharge requirements (Order No. 92-029). Contaminant concentrations and groundwater elevation trends are well established for the landfill and surrounding areas. Contaminant concentrations in groundwater have not varied significantly since 1993 (CH2M HILL, 2001). Previous investigations concluded that Landfill 26 has had an impact on groundwater and, possibly surface water and sediment, but that these impacts were not found outside the Landfill 26 boundary (CH2M HILL, 2001), or were mitigated in the case of surface water and sediment. Groundwater elevations are generally higher at or near the southern portion of the landfill, including the POL Hill Parcel area, and decrease further to the north. Because the impacts to groundwater, and potentially surface water and sediments, are limited to the boundary of the landfill, and since the groundwater flows are generally adjacent to or away from the POL Hill Parcel area, groundwater, surface water, and sediments at Landfill 26 are not likely to have an adverse impact on the POL Hill Parcel (CH2M HILL, 2001).

Several monitoring programs and investigations of methane gas have been conducted to monitor and evaluate the potential for migration of landfill gas from the landfill, through the buffer zone, and onto adjacent properties. Based on the results of a few monitoring events and investigations, the RWQCB issued CAO 01-139 requiring, among other things, control of releases of landfill gases from the landfill. Between January and August of 2002, in response to earlier correspondence with the RWQCB, an "interim" gas migration control trench was installed within the buffer zone along the southern boundary of the landfill. The northeasterly portion of the trench is located within the POL Hill Parcel. Preliminary sampling results from the outboard side of the trench suggest an improvement in methane gas levels to below action levels. Final determination of the cause of methane gas within perimeter gas probes in the buffer zone, or of the effectiveness of this trench, has not been made to date.

In December of 2002, a Human Health Risk Assessment (HHRA) for VOCs in Soil Gas was completed (CH2M HILL, 2002). The risk assessment was based upon the results of soil gas investigations performed in the Hamilton Meadows subdivision, which is located adjacent to the landfill buffer zone. In addition, soil gas investigations were conducted in the Hamilton Meadows subdivision and in the landfill buffer zone in accordance with a work plan developed in August 2001 (ITSI, 2001a) and modified in October 2001 (ITSI, 2001b). The HHRA evaluated the potential for exposures and potential for adverse human health effects associated with the occurrence of VOCs at the site and the adjacent residential development. Excess lifetime cancer risks higher than 1×10^{-6} , but less than 1×10^{-4} , were found at three locations south of the landfill and southwest of the POL Hill Parcel area. The conclusion of the risk assessment was that there was not an indication of the presence of current or future threats to human health for individuals in the residential area. In addition, subsequent to submittal of the report, and per a

letter from DTSC, it was concluded that the risk presented in the HHRA was likely overstated because it was based on the use of EPA cancer potency toxicity criteria for 1,3-butadiene that has subsequently been revised by EPA. The risk for two of the three sites is now predicted by DTSC to be less than 1×10^{-6} , using the new EPA criteria (DTSC, 2003). The lack of potentially significant human health risks at the residential development strongly indicates that there is also a lack of potential human health risks to recreational users at the POL Hill Parcel.

The landfill has ceased operation and is currently being monitored by the U.S. Army Corps of Engineers (CH2M HILL, 2001). A buffer zone around Landfill 26 extends approximately 150 to 200 feet into the northwestern portion of the POL Hill Parcel parcel. Restrictions on use in the buffer area are included in the Environmental Protection Provisions (Enclosure 5). As noted in Section 2, the Army will retain title to this portion of the POL Hill Parcel until such time as the landfill is transferred.

Additional information on the landfill may be found in the Army's 2001 and 2002 Methane Remedial Measures Studies for Landfill 26 and in the Army's 2002 Final Workplan for Installation of Interim Landfill Gas Migration Control Trench.

4. REMEDIATION

The POL Hill Parcel is adjacent to the General Services Administration (GSA) Phase I property at HAAF. For this reason the GSA Phase I Residential Cleanup Goals (RCG) were used to determine the adequacy of the remedial actions at the POL Hill Parcel.

TPH contaminated soil was detected at the POL Hill Parcel. The petroleum storage tanks and associated pipelines and structures were removed from the POL Hill Parcel. In addition, excavation activities were conducted at the locations of the former AST-2 and tank farm to remove (to the extent possible, i.e. down to bedrock) impacted soils where TPH concentrations were greater than 100 mg/kg. Soils in excess of 100 mg/kg at the location of Landfill 26 groundwater treatment plant were also removed to the extent practicable (i.e., down to bedrock). The GSA Phase I RCG for TPH measured as diesel in soils is 200 mg/kg while the RCG for TPH as gasoline is 100 mg/kg (Woodward-Clyde, 1995), therefore soils remediation is considered complete.

TPH contaminated groundwater was detected at the POL Hill Parcel at levels greater than the GSA Phase I RCGs of 1200 ug/L for TPH measured as diesel and 600 ug/L for TPH measured as gasoline. Since there is no RCG for TPH measured as JP-4, and given the age of the product being analyzed, the results of groundwater analysis for all petroleum hydrocarbons were added together and a total TPH RCG of 1,200 ug/L was used as the cleanup standard (CH2M HILL, 2003). The groundwater at the former tank farm area was remediated with the removal of contaminated soil (ESI, 1993). A draft closure report for the tank farm by CH2M HILL, entitled *Draft Closure Report POL Hill Outparcel, Hamilton Army Airfield*, was submitted to the Regional Water Quality Control Board in April 2003.

Groundwater monitoring associated with the POL Hill Parcel AST-2 Area was first completed in 1992 (IT, 1999). A comprehensive groundwater-monitoring and sampling program including quarterly, semiannual, and annual sampling schedules was developed for the POL Hill Parcel (including the AST-2 Area) in 1997 (IT, 1999). All groundwater samples were analyzed for TPH-purgeable (total petroleum hydrocarbons - gasoline), TPH-extractable (total petroleum hydrocarbons - diesel), BTEX (benzene, toluene, ethylbenzene, and xylenes), lead, and PNAs (poly nuclear aromatic hydrocarbons). However, the only constituent consistently detected above the cleanup level (i.e., GSA Phase I RCGs) were the TPH analytes. The BTEX, lead, and PNA concentrations were either not detected or were below RCGs. Beginning with the January 1999 monitoring event, the samples were analyzed only for TPH-purgeable and TPH-extractable. The only wells with combined TPH detections exceeding the GSA Phase I RCG of 1200 ug/L were PL-MW-101 and MW-POLA-121. Each of these wells is located within approximately 80 feet of the former AST-2 location (IT, 1999).

Contamination in excess of the GSA Phase I combined TPH RCG of 1200 ug/L remains in the groundwater in the area of former AST-2. An additional three rounds of groundwater sampling has been performed through August 2002 (SOTA, 2002). The SOTA results support the conclusion that the TPH-contaminated groundwater in bedrock fractures is relatively stable in the area of the former AST-2 and that natural attenuation is occurring. TPH concentrations appear to fluctuate seasonally, with the highest concentrations occurring in the winter and the lowest in the summer. These results suggest that a decrease of residual soil contamination dissolution near the capillary fringe resulting from the drop in the water table and /or the degrading of dissolved TPH in groundwater through natural attenuation processes may be occurring during the dry season (SOTA, 2002). The highest TPH concentration measured to-date in well MW-101 is 16,000 ug/L, which was collected in February 2002. The next highest concentration measured was in February 1997, at a concentration of 11,400 ug/L. The lowest concentration of total TPH detected in MW-101 was 3,900 ug/L in July 1998. Monitoring for BTEX was last conducted in October 1998. MW 101 contained 39 ug/L ethylbenzene and 47 ug/L xylenes at that time. These concentrations are well below the Phase I RCGs of 1,924,000 ug/L for ethylbenzene and 20,299,000 ug/L for xylenes (CH2M HILL, 2003a).

The Army has proposed monitored natural attenuation as a final corrective action to address the residual groundwater contamination beneath the former AST-2. The proposed corrective action is described in a plan prepared by CH2M HILL, entitled *Draft POL Hill AST-2 Area Corrective Action Plan*, dated February 2003, that has been submitted to the Regional Water Quality Control Board for review (CH2M HILL, 2003a).

5. REGULATORY/PUBLIC COORDINATION

The RWQCB, USEPA Region 9, DTSC, and the public were notified of the intent to sign the FOST. The FOST was made available for a 30-day public review period beginning June 30, 2003. The public notice was published in the Marin Independent Journal and the Novato Advance. The FOST was made available for public review at the following locations:

Hamilton Administrative Record Library
Hamilton Army Airfield
1 Burma Road
Novato, CA 94949
415-883-6386

The Main Branch of the Novato Public Library
1720 Novato Blvd.
Novato, CA 94947
415-898-4623

Also online at: <http://www.spk.usace.army.mil/cespk-pm/haaf/docs.html>

A copy of the regulatory/public comments has been provided (see Enclosure 6).

6. NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) COMPLIANCE AND CONSISTENCY WITH LOCAL REUSE PLAN

The environmental impacts associated with the proposed transfer of the Property have been analyzed in accordance with the National Environmental Policy Act (NEPA). The results of this analysis have been documented in the Environmental Assessment for the Closure and Realignment of Hamilton Army Airfield (HAAF), CA, dated September 1991, and in the Environmental Assessment, Remedial Work on BRAC Property, dated March 1995. No encumbrances or conditions necessary to protect human health or the environment were identified in the above studies. The adopted local reuse plan, indicates that the intended reuse of the parcel is for recreation and open space. The proposed transfer is consistent with this intended reuse.

7. ENVIRONMENTAL PROTECTION PROVISIONS

On the basis of the above results from the Hospital Hill and POL Hill Environmental Baseline Survey and other environmental studies and in consideration of the intended use of the Property, certain terms and conditions are required for the proposed transfer (CH2M HILL, 2001). These terms and conditions are set forth in the attached Environmental Protection Provisions (Enclosure 5) and will be included in the deed.

California Civil Code Section 1471 allows grantees of real property to place covenants that will “run with the land” (i.e., that will apply to all subsequent property owners) on the property being transferred. These covenants can place environmental restrictions on the property to be transferred if the covenant is “reasonably necessary to protect present or future human health or safety or the environment as a result of the presence on the land of hazardous materials.”

8. FINDINGS OF SUITABILITY TO TRANSFER

Based on the above information, I conclude that all Department of Defense requirements to reach a FINDING OF SUITABILITY TO TRANSFER the property have been met, subject to the terms and conditions set forth in the attached Environmental Protection Provisions (Enclosure 5). All removal or remedial actions necessary to protect human health and the environment have been taken and the property is transferable under CERCLA section 120(h)(3). In addition to the Environmental Protection Provisions, the deed for this transaction will also contain:

- The covenant under CERCLA §120(h)(3)(A)(ii)(I) warranting that all remedial action under CERCLA necessary to protect human health and the environment with respect to hazardous substances remaining on the Property has been taken before the date of transfer.
- The covenant under CERCLA §120(h)(3)(A)(ii)(II) warranting that any remedial action under CERCLA found to be necessary after the date of transfer with respect to such hazardous substances remaining on the property shall be conducted by the United States.
- The clause as required by CERCLA §120(h)(3)(A)(iii) granting the United States access to the property in any case in which remedial action or corrective action is found to be necessary after the date of transfer.

As required under the CERCLA Section 120(h) and DOD FOST Guidance, notification of hazardous substance activities and petroleum product activities shall be provided in the deed. See Enclosure 3 – Notice of Hazardous Substance and Petroleum Storage, Release, or Disposal.

UNITED STATES OF AMERICA

JAN 15 2004

By: *Donald L Bohannon*
for GLYNN RYAN
Chief, Atlanta Field Office
Headquarters Department of the Army
Base Realignment and Closure
Fort McPherson, GA

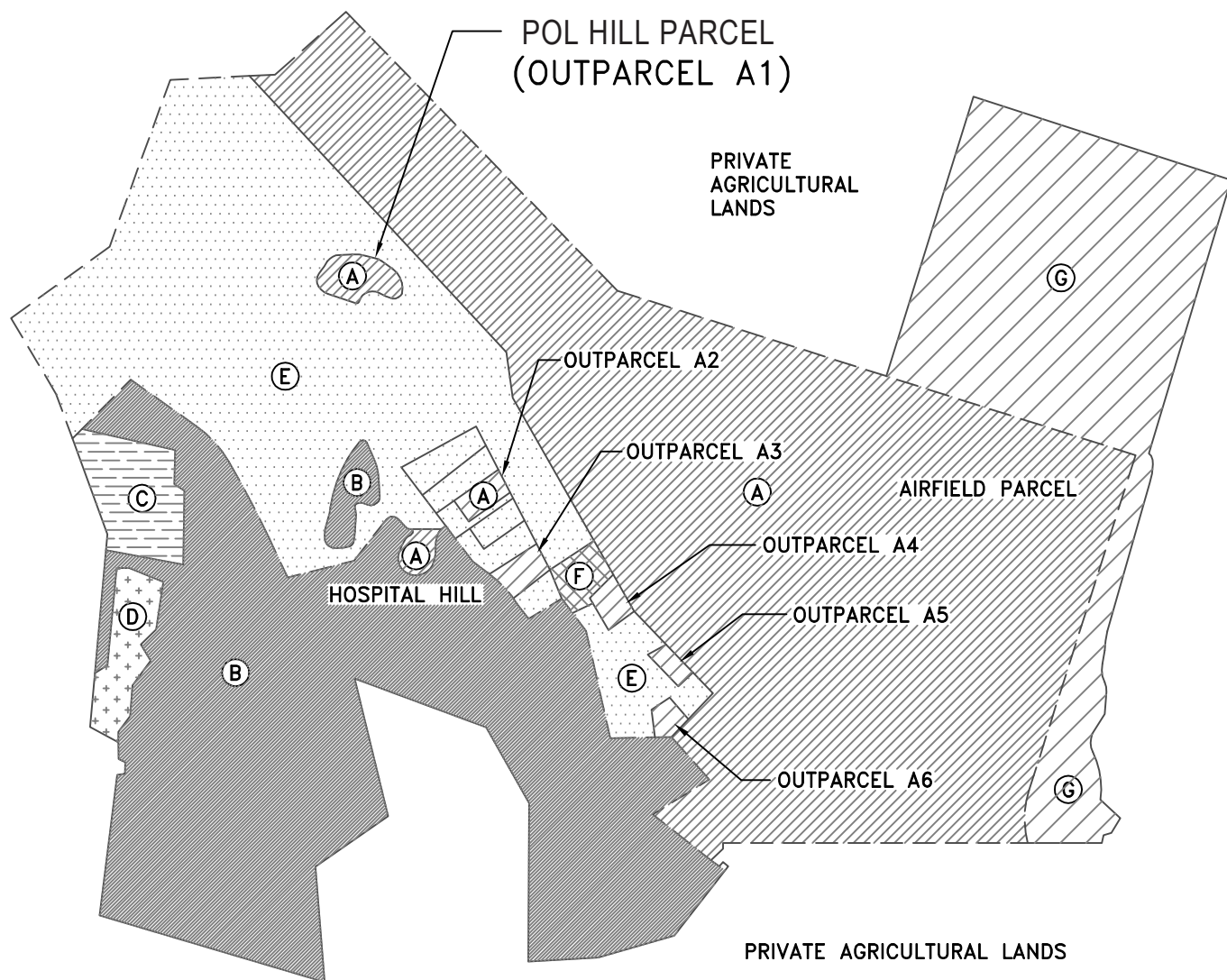
6 Enclosures:

- Encl 1 Figures : Figure 1 – Location Map - POL Hill Parcel; Figure 2 – Site Map – POL Hill Parcel
- Encl 2 Environmental Condition of Property Categories
- Encl 3 Notice of Hazardous Substance and Petroleum Product Storage, Release, or Disposal
- Encl 4 ACM Removal and Cleanup Activities
- Encl 5 Environmental Protection Provisions
- Encl 6 Regulatory/Public Comments and Installation Position on Unresolved Comments








ENCLOSURE 1

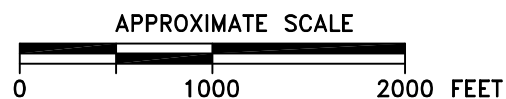
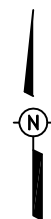
Figure 1 Location Map - POL Hill Parcel

Figure 2 Site Map - POL Hill Parcel



LEGEND:

- ARMY-OWNED PROPERTY BOUNDARY
- (A)  BRAC PROPERTY
- (B)  NAVY HOUSING
- (C)  LANHAM HOUSING
- (D)  NOVATO SCHOOL DISTRICT
- (E)  GSA SALE PARCEL
- (F)  US COAST GUARD
- (G)  STATE OF CALIFORNIA



SOURCES:

Woodward-Clyde Federal Services Drawing SK9469

International Technology Corporation Drawing 762538-A315

**FIGURE 1
LOCATION MAP - POL HILL PARCEL
HAMILTON ARMY AIRFIELD**

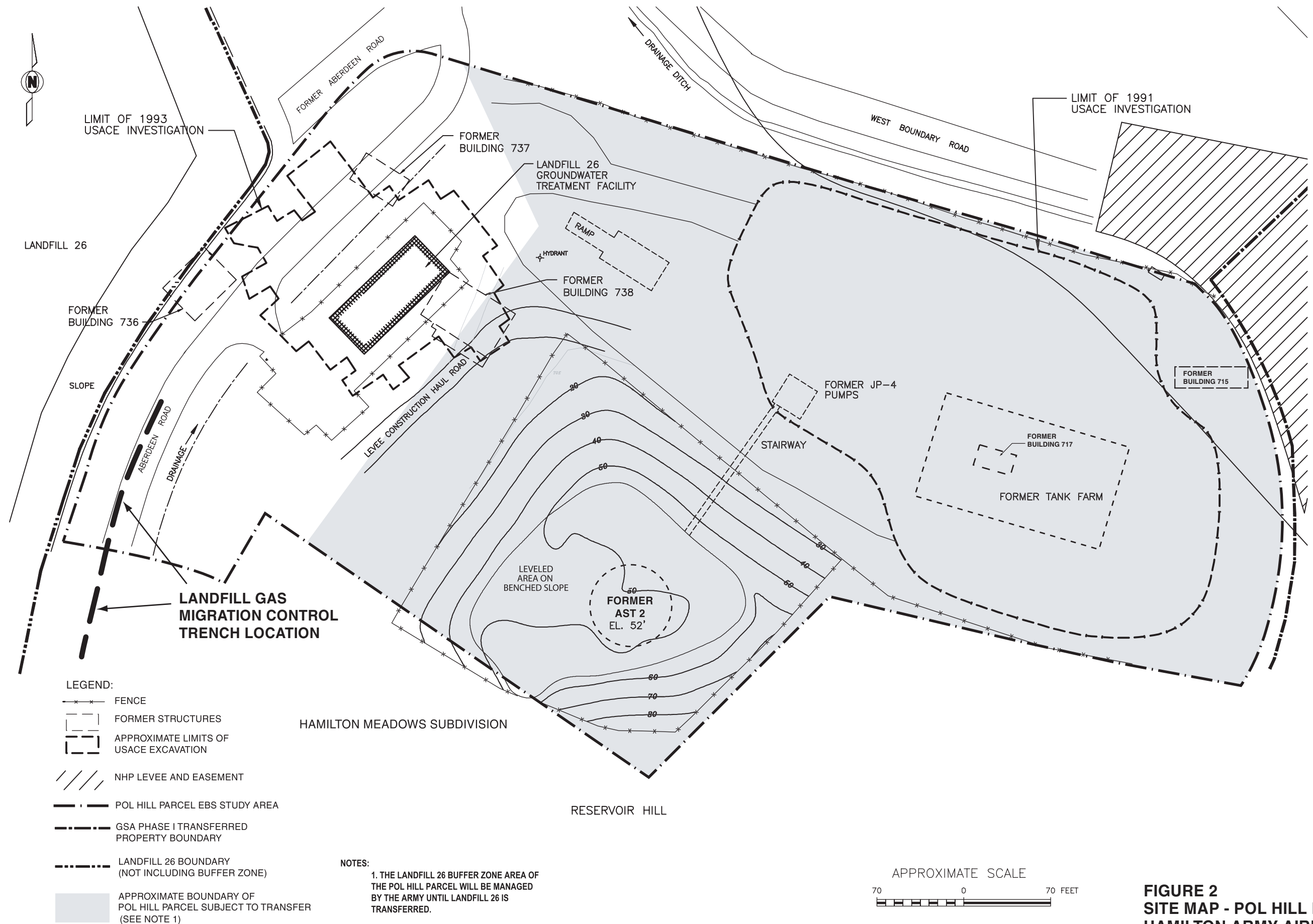


FIGURE 2
SITE MAP - POL HILL PARCEL
HAMILTON ARMY AIRFIELD

ENCLOSURE 2

ENVIRONMENTAL CONDITION OF PROPERTY CATEGORIES

TABLE E2-1

Identification of Property and Environmental Condition

Facility Identification	Environmental Condition of Property Category	Environmental Condition of Property and Former, Ongoing, or Planned Remedial Actions
POL Hill Parcel	Category 2	<p>Soil contamination – Soil contaminated with petroleum at concentrations greater than 100 milligrams per kilogram (mg/kg) was removed from the former tank farm area. Soil contaminated with petroleum at concentrations greater than 100 mg/kg was removed from beneath the former location of AST 2.</p> <p>Groundwater contamination – TPH contamination is present in groundwater in the vicinity of the former location of AST 2. Recent sampling events show the area of contamination is stable and located within fractured bedrock entirely on POL Hill Parcel property. TPH contamination detected in groundwater at the tank farm area was remediated.</p>

Environmental Condition of Property Categories:

Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).

Category 2: Areas where only release or disposal of petroleum products has occurred.

Category 3: Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.

Category 4: Areas where release, disposal, and/or migration of hazardous substances has occurred, and all removal or remedial actions to protect human health and the environment have been taken.

Category 5: Areas where release, disposal, and/or migration of hazardous substances has occurred, and removal or remedial actions are underway, but all required remedial actions have not yet been taken.

Category 6: Areas where release, disposal, and/or migration of hazardous substances has occurred, but required actions have not yet been implemented.

Category 7: Areas that are not evaluated or require additional evaluation.

ENCLOSURE 3

NOTICE OF HAZARDOUS SUBSTANCE AND PETROLEUM PRODUCT STORAGE, RELEASE, OR DISPOSAL

TABLE E3-1

Notice of Hazardous Substance Storage, Release, or Disposal

Building Number	Name of Hazardous Substance(s)	Date of Storage, Release, or Disposal	Remedial Actions
737	Forty, 55-gallon drums labeled oil, hydraulic oil, waste oil and waste solvent. Four, 55-gallon drums labeled as containing PCBs.	Time/length/quantities of storage is not known. However hazardous materials storage ceased when the building was demolished in 1993. Containers were observed during 1991 inspection, and removed in 1993. There are no documented releases of hazardous substances	Drums were removed by Presidio contractor prior to building demolition during the construction of Landfill 26 Water Treatment Plant (WTP). TPH soil contamination was discovered in general area during Landfill 26 groundwater treatment plant construction. Soil >100 milligrams per kilogram (mg/kg) TPH was excavated and backfilled with clean soil.

*The information contained in this notice is required under the authority of regulations promulgated under section 120(h) of the Comprehensive Environmental Response, Liability, and Compensation Act (CERCLA or "Superfund") 42 U.S.C. section 9620(h).

TABLE E3-2

Notice of Petroleum Product Storage, Release, or Disposal

Building Number	Name of Petroleum Product(s)	Date of Storage, Release, or Disposal	Remedial Actions
Tank Farm Area	JP-4 Jet Fuel	Twenty 25,000-gallon underground storage tanks.	Tanks, associated piping and structures and soil contaminated with >100 milligrams per kilogram (mg/kg) TPH were removed between 1986 and 1991. Contaminated soil was removed to the extent physically possible. The area was backfilled with clean soil.
Tank Farm Area	JP-4 Jet Fuel	One 20,000-gallon above ground storage tank	AST removed in 1990 during soil contamination removal activities for the UST tank farm.
Tank Farm Area	Mogas and JP-4 Jet Fuel	One 25,000-gallon above ground storage tank.	Tank and soil contaminated with >100 mg/kg TPH was removed between 1986 and 1991. Contaminated soil was removed to the extent physically possible. The area was backfilled with clean soil.
Tank Farm Area	JP-4 Jet Fuel	One 750-gallon underground storage tank.	Tank, associated piping and structures and soil contaminated with >100 milligrams per kilogram (mg/kg) TPH were removed between 1986 and 1991. Contaminated soil was removed to the extent physically possible. The area was backfilled with clean soil.
AST 2	JP-4 Jet Fuel	One 840,000-gallon above ground storage tank.	This AST was removed in 1986. Following removal, soil and groundwater contaminated with TPH was discovered. Soil contaminated by TPH with concentrations greater than 100 mg/kg were removed to the extent physically possible. Some areas of soil and groundwater contaminated with TPH remain in this area. Groundwater monitoring with natural attenuation is the selected remedy.
Near 737 and 738	"Flammable Liquid"	One 650-gallon above ground storage tank.	Tank was removed prior to the construction of the Landfill 26 groundwater treatment plant in 1993.
Near 737 and 738	"Diesel Fuel"	One 2,500-gallon above ground storage tank.	Tank was removed prior to the construction of the Landfill 26 groundwater treatment plant in 1993.
NA	Not applicable		

ENCLOSURE 4

ACM REMOVAL AND CLEANUP ACTIVITIES

TABLE E4-1
ACM Removal and Cleanup Activities

Building	Built Prior to 1985	Survey Results	Building Status	Notes
<i>POL Hill Parcel</i>				
715	Yes	Contained asbestos	Demolished	Asbestos removed prior to building demolition by IT Corp.
717	Yes	Not surveyed	Demolished	Building removed during POL Hill Parcel investigation and remediation by IT Corp.
736	Yes	Contained asbestos	Demolished	Prior to building demolition, asbestos was removed by Marcor. Building removed during the construction of the Landfill 26 treatment plant.
737	Yes	Contained asbestos	Demolished	Prior to building demolition, asbestos was removed by Marcor. Building removed during the construction of the Landfill 26 treatment plant.
738	Yes	Contained asbestos	Demolished	Prior to building demolition, asbestos was removed by Marcor. Building removed during the construction of the Landfill 26 treatment plant.
Landfill 26 Treatment Plant	No	NA	Present	Built in 1993 – No asbestos.

ENCLOSURE 5

ENVIRONMENTAL PROTECTION PROVISIONS

The following conditions, restrictions, and notifications will be placed in the deed to ensure protection of human health and the environment and to preclude any interference with ongoing or completed remediation activities at Hamilton Army Airfield.

1. INCLUSION OF PROVISIONS

The Grantee to whom the property is transferred shall neither transfer the property, lease the property, nor grant any possessory interest, privilege, or license whatsoever in connection with the property without the inclusion of the environmental protection provisions contained herein, and shall require the inclusion of such environmental protection provisions in all further deeds, transfers, leases, or grant of any interest, privilege, or license.

2. CERCLA ACCESS CLAUSE

The Government, the U.S. Environmental Protection Agency (USEPA), California Department of Toxic Substances Control (DTSC), the Regional Water Quality Control Board (RWQCB) and their officers, agents, employees, contractors, and subcontractors have the right, upon reasonable notice to the Grantee, to enter upon the Property in any case in which a response action or corrective action is found to be necessary, after the date of transfer of the property, or such access is necessary to carry out a response action or corrective action on adjoining property, including, without limitation, the following purposes:

- To conduct investigations and surveys, including, where necessary, drilling, soil and water sampling, test-pitting, test soil borings and other activities
- To inspect field activities of the Government and its contractors and subcontractors
- To conduct any test or survey related to the environmental conditions at the Property or to verify any data submitted to USEPA, DTSC or the RWQCB by the Government relating to such conditions
- To construct, operate, maintain or undertake any other response or remedial actions as required or necessary including, but not limited to monitoring wells, pumping wells and treatment facilities

3. NO LIABILITY FOR NON-ARMY CONTAMINATION

The Army shall not incur liability for additional response action or corrective action, found to be necessary after the date of transfer, in any case in which the person or entity to whom the property is transferred, or other non-Army entities, is identified as the party responsible for contamination of the property.

4. RESTRICTED TO RECREATIONAL/COMMERCIAL/INDUSTRIAL USE

The Department of the Army has undertaken careful environmental study of the property and concluded, with the Grantee's concurrence, that the highest and best use of the POL Hill Parcel property is limited, as result of its environmental condition, to recreational, commercial, and industrial uses. In order to protect human health and the environment and further the common environmental objectives and land use plans of the United States, the State of California and Grantee (City of Novato), covenants and restrictions shall be included to assure the use of the property is consistent with the environmental condition of the Property. These

following restrictions and covenants benefit the lands retained by the Grantor and the public welfare generally and are consistent with state and federal environmental statutes.

A. Restrictions and Conditions – Remediation. The Grantee covenants for itself, its successors, and assigns not to use the POL Hill Parcel for residential purposes. The Grantee, for itself, its successors or assigns covenants that it will not undertake nor allow any activity on or use of the property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable. Nothing contained herein shall preclude the Grantee from undertaking, in accordance with applicable laws and regulations and without any cost to the Grantor, such additional remediation necessary to allow for residential use of the Property. Upon completion of such remediation required to allow residential use of the Property and upon the Grantee's obtaining the approval of DTSC and the RWQCB and, if required, any other regulatory agency, the Grantor agrees, without cost to the United States, to release or, if appropriate, modify this restriction by recordation of an amendment hereto.

B. Restrictions and Conditions – Landfill Buffer Zone (Not to be Transferred at this time). The Grantee covenants for itself, its successors, and assigns that it will not construct any structures that could potentially impact the integrity, performance, or monitoring requirements of Landfill 26 within the buffer zone for the landfill that lies within the POL Hill Parcel Property. The Grantee, for itself, its successors, and assigns also covenants that it will not conduct any activities within the buffer zone for Landfill 26 that will alter or add additional drainage to the natural or engineered surface water drainage system for the landfill. The Grantee covenants for itself, its successors, and assigns that it will not construct any structures within 1000 feet of Landfill 26 without authorization of the CIWMB, EA, etc. There are several existing Regional Water Quality Control Board Orders (i.e., WDR 96-113, CAO 01-139, and TSO 01-140) that affect both the landfill site and the buffer zone. In addition, the groundwater treatment plant falls within the domain of these orders. While the groundwater extraction and treatment system has never been operated beyond initial startup, Order No. 96-113 specifically requires that the groundwater extraction well system and groundwater treatment plant be maintained so that they can be operated as needed.

In addition, a letter from the California Integrated Waste Management Board to Hamilton Army Air Field, dated June 18, 2003, states: "While Board staff preference would be to prohibit development other than non-irrigated open space, within 1000 feet of the Landfill 26 footprint, we realize that because of development potential, that is not a likely scenario. Therefore, we recommend that as a condition of transfer of this parcel to the City of Novato, any proposed future development at this site be required to comply with standards contained in Title 27 of the California Code of Regulations (27 CCR), Section 21190, Postclosure Land Use. This regulation requires that all postclosure land uses within 1,000 feet of the disposal area footprint shall be reviewed and approved by the Enforcement Agency. Furthermore, it states that all construction within 1,000 feet of the boundary of any disposal area shall be designed and constructed with an impermeable layer, venting pipes, and automatic gas sensors with periodic methane gas monitoring conducted inside all buildings or an equivalent design that prevents gas migration into structures."

5. GROUNDWATER RESTRICTIONS AND COVENANTS

A. Restrictions and Conditions. The Grantee covenants for itself, its successors, and assigns not to: (a) access or use groundwater underlying the POL Hill Parcel for any purpose, (b) construct or create any groundwater recharge area, unlined surface impoundment or disposal trench, or (c) conduct any activity that could interfere with, or adversely affect, the groundwater monitoring system or remedy. For the purpose of this restriction, "groundwater"

shall have the same meaning as in Section 101(12) of CERCLA. The Grantee, for itself, its successors or assigns covenants that it will not undertake nor allow any activity on or use of the property that would violate the restrictions contained herein. These restrictions and covenants are binding on the Grantee, its successors and assigns; shall run with the land; and are forever enforceable.

B. Enforcement. The restrictions and conditions stated in Section A benefit the public in general and the territory surrounding the Property, including lands retained by the United States, and, therefore, are enforceable by the United States government. The Grantee covenants for itself, its successors, and assigns that it shall include and otherwise make legally binding, the restrictions in Section A in all subsequent lease, transfer or conveyance documents relating to the POL Hill Parcel subject hereto.

C. Army Access. The Army and its representatives shall, for all time, have access to the Property for the purpose of operating/maintaining equipment, installing and/or removing groundwater monitoring wells, and to perform continued monitoring of groundwater conditions, allowing chemical and/or physical testing of wells to evaluate water quality and/or aquifer characteristics. The property owner shall allow ingress and egress of all equipment necessary to accomplish the same.

D. Agency Access. DTSC and the RWQCB shall have reasonable right of entry and access to the Property for inspection, monitoring, and other activities consistent with the purposes of this Covenant as deemed necessary by DTSC and RWQCB in order to protect the public health and safety and oversee the groundwater remediation activities.

6. NOTICE OF THE PRESENCE OF LEAD-BASED PAINT AND COVENANT AGAINST THE USE OF THE PROPERTY FOR RESIDENTIAL PURPOSES

A. The Grantee is hereby informed and does acknowledge that all former buildings on the Property, which were constructed or rehabilitated prior to 1978, are presumed to have contained lead-based paint (LBP). Grantee, its successors and assigns, are hereby informed that lead from paint, paint chips, and dust can pose health hazards if not managed properly.

B. Available information concerning known LBP and/or LBP hazards, the location of LBP and/or LBP hazards, and the condition of painted surfaces, contained in the Environmental Baseline Survey, have been provided to the Grantee. All purchasers must receive the federally approved pamphlet on lead poisoning prevention. The Grantee hereby acknowledges receipt of all of the information described in this subparagraph.

C. The covenants, restrictions, and requirements of this Section shall be binding upon the Grantee, its successors and assigns and all future owners and shall be deemed to run with the land. The Grantee on behalf of itself, its successors and assigns covenants that it will include and make legally binding, this Section, in all subsequent transfers, leases, or conveyance documents.

D. The Grantee and its successors and assigns covenant and agree that they shall not permit the occupancy or use of any buildings or structures on the Property as Residential Real Property without complying with this NOTICE OF THE PRESENCE OF LEAD-BASED PAINT AND COVENANT AGAINST THE USE OF THE PROPERTY FOR RESIDENTIAL PURPOSES and all applicable federal, state, and local laws and regulations pertaining to lead-based paint and/or lead-based paint hazards. Prior to permitting the occupancy of the Property where its use subsequent to sale is intended for residential habitation, Grantee, its successors and assigns, specifically agree to perform, at its sole expense, the Grantor's abatement

requirements under Title X of the Housing and Community Development Act of 1992 (Residential Lead-Based Paint Hazard Reduction Act of 1992) (hereinafter Title X).

The Grantee, its successors and assigns, shall, after consideration of the guidelines and regulations established pursuant to Title X:

1. Perform a Risk Assessment if more than 12 months have elapsed since the date of the last Risk Assessment;
2. Comply with the joint HUD and EPA Disclosures Rule (24 CFR 35, Subpart H, 40 CFR 745, Subpart F), when applicable, by disclosing to prospective purchasers the known presence of lead-based paint and/or lead-based paint hazards as determined by previous risk assessments;
3. Abate lead dust and lead-based paint hazards in pre-1960 residential real property as defined in paragraph above, in accordance with the procedures in 23 CFR 35;
4. Abate soil-lead hazards in pre-1978 residential real property, as defined above, in accordance with the procedures in 24 CFR 35;
5. Abate lead-soil hazards following demolition and redevelopment of structures in areas that will be developed as residential real property;
6. Comply with the EPA lead-based paint work standards when conducting lead-based paint activities (40 CFR 745, Subpart L);
7. Perform the activities described in this paragraph within 12 months of the date of the lead-based paint risk assessment and prior to occupancy or use of the residential real property; and
8. Send a copy of the clearance documentation to the Grantor.

In complying with these requirements, the Grantee, its successors and assigns, covenant and agree to be responsible for any abatement or remediation of lead-based paint or lead-based paint hazards on the Property found to be necessary as a result of the subsequent use of the Property for residential purposes. The Grantee, its successors and assigns, covenant and agree to comply with solid or hazardous waste laws that may apply to any waste that may be generated during the course of lead-based paint abatement activities.

The Grantor assumes no liability for remediation or damages for personal injury, illness, disability, or death, to the Grantee, its successors or assigns, sublessees, or to any other person, including members of the general public, arising from or incidental to possession and/or use of any portion of the Property containing lead-based paint. The Grantee, its successors or assigns, further agrees to indemnify and hold harmless the Grantor, its officers, agents and employees, from and against all suits, claims, demands or actions, liabilities, judgments, costs and attorneys' fees arising out of, or in any manner predicated upon, personal injury, death, or property damage resulting from, related to, caused by or arising out of the possession and/or use of any portion of the Property containing lead-based paint. The obligation of the Grantee, its successors and assigns, shall apply whenever the United States incurs costs or liabilities for actions giving rise to liability under this section.

7. NOTICE OF POTENTIAL UNEXPLODED ORDNANCE

Based upon a review of existing records and available information, none of the former buildings and/or land proposed for transfer is known to contain unexploded ordnance (UXO). Notwithstanding the records search conducted by the GRANTOR, the parties acknowledge that, because this is a former military installation with a history of Ordnance and Explosives use, there is a potential for UXO to be present on the Property. In the event that the Grantee, its successors, and assigns, should discover any ordnance on the Property, it shall not attempt to remove or destroy it, but shall immediately notify the local Police Department; the Army and competent Grantor, or Grantor-designated explosive ordnance personnel, will then be dispatched promptly to dispose of such ordnance at no expense to the Grantee.

ENCLOSURE 6

REGULATORY/PUBLIC COMMENTS AND INSTALLATION POSITION ON UNRESOLVED COMMENTS

Davies Associates Comments on *Draft Final, Finding of Suitability to Transfer*,

Former Hamilton Army Airfield, POL Hill, (FOST)

June 2003

No.	Comments	Responses
James C. Davies, Principal, Dated July 21, 2003		
General Comments:		
1.	<p>The FOST states the POL Hill property consists of 7.84 acres but the Army's Draft Quitclaim Deed, Hamilton Army Airfield, Marin County, California states that it consists of 5.84 acres. It is assumed but not stated in either the FOST or the Quitclaim Deed that the 2-acre differential is that portion of the property that lies within the Landfill 26 (LF 26) Buffer Zone. While the FOST says the 2-acre buffer zone area will be retained by the Army until such time that the title of LF 26 is transferred to the City, the Quitclaim Deed only mentions this area in one place which does not discuss ownership. This inconsistency among Army documents raises several concerns because first, it is not a certainty that the City will take title to LF 26 in the future so the FOST should not be dependent upon this transaction occurring and second, the environmental conditions of the 2 acre buffer zone portion are far from being fully known. Based upon this significant data gap, it does not seem possible that the Army can declare the 2-acre buffer zone area as suitable for transfer. Therefore, the City recommends that the Army clarify and rectify the status of the 2-acre buffer zone and make the FOST and Quitclaim Deed consistent. Additional recommendations on this issue are presented in the following Specific Review Comments.</p>	<p>The entire POL Hill Parcel consists of 7.84 acres. The portion of the POL Hill Parcel that will be transferred is 5.67 acres. The Landfill 26 Buffer Zone is a little more than 2 acres. The FOST has been revised for clarification. The Quitclaim Deed will be revised to correspond to the FOST.</p> <p>The environmental conditions for the POL Hill Parcel are identified in the Environmental Baseline Survey for Hospital Hill and POL Hill, dated November 2001, which is cited as a reference in Section 3 of the FOST. All releases of hazardous substances have been identified. Issues related to the adjacent landfill are being addressed under separate documentation.</p>
2.	<p>The FOST uses the names POL Hill and POL Hill Outparcel interchangeably in the document and Figure 1 labels the property as Outparcel A1 but the Quitclaim Deed uses POL Hill</p>	<p>The FOST has been revised to use the name "POL Hill Parcel."</p>

No.	Comments	Responses
	<p>Parcel consistently throughout. It is recommended that the Army select one name and use it consistently though out the FOST and Quitclaim Deed. If Outparcel is included in the name, it is recommended that an explanation for the term be included in the beginning of the FOST. Use of the full name of POL Hill Outparcel A1 should be considered in order to be consistent with the naming of the previous Army outparcels transferred at the base.</p>	
Specific Comments:		
1.	<p><u>Section 2</u> – As mentioned in General Comment 1, the opening paragraph of this section states that the FOST encompasses the entire 7.84-acre POL Hill parcel including the 2-acre portion within the LF 26 Buffer Zone which will be retained by the Army until such time that the title of LF 26 is transferred to the City. This approach raises two primary concerns for the City. First, it is not a certainty that the City will take title to LF 26 in the future or, if it does, when that might occur. Therefore, it is recommended that the potentially misleading wording be removed from the FOST. Second, the environmental conditions of the 2 acre buffer zone area are far from being fully known so an accurate determination of its suitability for transfer cannot be made at this time. The significant data gaps for this area in the FOST include the following:</p> <ul style="list-style-type: none"> a. The known environmental conditions for the western portion of the 2-acre buffer zone area that appears to contain the eastern end of the Interim Gas Migration Control Trench for LF 26 (gas migration trench; see Specific Review Comment 9 below) that has been investigated, installed and monitored over the past two years so there is ample data on the area. b. The known environmental conditions for the remainder of the 2-acre buffer zone area east of the gas 	<p>Statements indicating that the City will take the Landfill 26 Buffer Zone in later transfer have been removed from the FOST.</p> <p>The 2-acre Landfill 26 Buffer Zone has not been removed from the FOST. All known releases to soil in the buffer zone have been remediated prior to installation of the groundwater treatment plant. No releases of methane have been documented at POL Hill, just migration through the buffer zone. The only known releases in the buffer zone are of petroleum. Issues related to the adjacent landfill are being addressed under separate documentation.</p>

No.	Comments	Responses
	<p>migration trench based on previous Army LF 26 studies.</p> <p>c. The unknown environmental conditions of the remainder of the 2 acre buffer zone portion east of the gas migration trench that is not scheduled for investigation under the California Regional Water Quality Control Board's (RWQCB) Time Schedule Order 01-140 until 2005.</p> <p>It is clear that additional environmental investigation and monitoring work remains to be performed before a determination of suitability for transfer can be made for the 2-acre buffer zone area. Since it appears that the Quitclaim Deed does not include transferring the 2-acre buffer zone area to the City at this time, it is recommended that this area be excluded from this FOST and be included in the LF 26 FOST at the time it becomes suitable for transfer. Therefore, this FOST should only address the 5.84 acres that are in the Quitclaim Deed and will be transferred to the City.</p>	
2.	<p><u>Section 3</u> – This section presents the documents used by the Army to make its determination on the environmental conditions of the property yet several key documents that provide supporting statements and conclusions presented in the FOST are not listed. Recommendations are made in several of the following Specific Comments for documents that should be added to the list.</p>	<p>Only documents used to make findings and recommendations for this FOST have been included in the reference list. The following documents have been added to the reference list in Section 3 of the FOST:</p> <ol style="list-style-type: none"> 1. 1992 Explanation of Significant Difference 2. California Integrated Waste Management Board, Letter to U.S. Army concerning FOST for Parcel POL Hill 3. Human Health Risk Assessment (HHRA) for Volatile Organic Compounds in Soil Gas Near Hamilton Army Airfield Landfill 26 4. Corrective Action Work Plan, Hamilton Army Airfield, GSA Phase I Sale Area, Revision 1
3.	<p><u>Section 3.5</u> – This section states that Marcor removed the asbestos-containing materials (ACM) from the POL Hill buildings, that ACM does not pose an unacceptable risk to human health or the environment and that there were no known</p>	<p>Work done by Marcor is documented in Section 3 of the FOST as Reference #17, Unpublished project notes, logs, and laboratory data from Remedial Action Landfill 26 Phase I contract with Environmental Health, Research, and Testing, Inc.</p>

No.	Comments	Responses
	releases of asbestos to the environment. However, there are no references to any MARCOR reports documenting the abatement that substantiate these statements. Therefore, it is recommended that references to the relative Marcor reports that document the ACM removal and the FOST statements be included in this section and that the reports be added to the Section 2 document list.	(EHRT) – 1993 through 1995. No report on asbestos removal activities at Building 737 was prepared by Marcor. Conclusions regarding the risk posed by asbestos and the statement that there were no known releases of asbestos to the environment from POL Hill have been drawn from the Environmental Baseline Survey (Reference # 2 in Section 3 of the FOST). No change to the FOST has been made.
4.	<u>Section 3.11, Paragraph 1</u> – This paragraph refers to the 1989 Record of Decision and the 1992 Explanation of Significant Difference for LF 26 but these documents are not presented in Section 2. It is recommended that add references to these documents be added to this section and that the documents be added to the Section 2 list.	The 1989 ROD referred to in the FOST pertained to base closure and transfer of ownership of the entire Hamilton facility. It was not for the purpose of environmental cleanup, and therefore, does not need to be referenced in the FOST. The 1992 Explanation of Significant Difference has been added to the reference list in Section 3 of the FOST.
5.	<u>Section 3.11, Paragraph 2</u> – The last sentence states that “Controls for adjacent properties within the 1,000-foot limit are typically administered through local agreements, policies and ordinances, which should be established for the POL Hill property adjacent to the landfill.” As stated earlier in the second paragraph of Section 3, the referenced 1000-foot limit applies to the area within the landfill property boundary and not the area outside the boundary; please make the necessary change in the text. Furthermore, the end of the last sentence makes the recommendation that controls should be established for the POL Hill property adjacent to the landfill. The City believes that the FOST is a statement of findings and that it is not the appropriate place for a recommendation of this type. Therefore, it is recommended that the last part of the last sentence be removed.	According to a letter from the California Integrated Waste Management Board to Hamilton Army Air Field, dated June 18, 2003, “While Board staff preference would be to prohibit development other than non-irrigated open space, within 1000 feet of the Landfill 26 footprint, we realize that because of development potential, that is not a likely scenario. Therefore, we recommend that as a condition of transfer of this parcel to the City of Novato, any proposed future development at this site be required to comply with standards contained in Title 27 of the California Code of Regulations (27 CCR), Section 21190, Postclosure Land Use. This regulation requires that all postclosure land uses within 1,000 feet of the disposal area footprint shall be reviewed and approved by the Enforcement Agency. Furthermore, it states that all construction within 1,000 feet of the boundary of any disposal area shall be designed and constructed with an impermeable layer, venting pipes, and automatic gas sensors with periodic methane gas monitoring conducted inside all buildings or an equivalent design that

No.	Comments	Responses
		<p>prevents gas migration into structures.”</p> <p>This letter has been added as a reference to Section 3 and quoted in Section 4.B of Enclosure 5 to the FOST.</p>
6.	<p><u>Section 3.11, Paragraph 3</u> – The third paragraph refers to the RWQCB Orders requiring the “maintenance of the groundwater extraction well system and groundwater treatment plant at the landfill so it may be operated in the event pollutants are detected in the groundwater”. However, apparently this requirement is not being complied with because the treatment plant is inoperative because the power has been disconnected. Also, it is understood that the Army has asked permission from the RWQCB to dismantle the treatment system inside the building. Please revise this paragraph to address these inconsistencies between the text and the RWQCB Orders.</p>	<p>The groundwater treatment system was constructed by the Sacramento District of the U. S. Army Corps of Engineers under the FUDS program. Whether or not the treatment system is being operated in compliance with RWQCB requirements is beyond the scope of this FOST. Questions regarding the status of compliance of the system should be directed at the Corps of Engineers.</p> <p>No change to the FOST has been made.</p>
7.	<p><u>Section 3.11, Paragraph 4</u> – This section discusses the groundwater conditions at LF 26 but does not include any mention of the Army’s quarterly and annual groundwater monitoring reports. It is recommended that, at a minimum, the Army’s most recent groundwater monitoring report be mentioned, referenced and the document included in the Section 2 list.</p>	<p>The most recent groundwater monitoring report on the POL Hill Parcel is cited as Reference # 10. Groundwater monitoring for Landfill 26 is conducted by the U.S. Army Corps of Engineers, and is not within the scope of this FOST. The discussion of Landfill 26 in Section 3.11 of the FOST is primarily taken from the Environmental Baseline Survey, which is referenced in Section 3 of the FOST (Ref. # 2).</p> <p>No change to the FOST has been made.</p>
8.	<p><u>Section 3.11, Paragraph 5</u> – This paragraph addresses the migration of landfill gases and the installation and monitoring of the gas migration trench. However, this paragraph does not provide any information about the Army’s 2001 and 2002 Methane Remedial Measures Studies for LF 26 or the design presented in the Army’s 2002 Final Workplan for Installation of Interim Landfill Gas Migration Control Trench. It is recommended that pertinent information from these reports be added to this paragraph along with references and that they are included in the Section 2 document list.</p>	<p>The gas migration trench is discussed in the FOST because it is located on the POL Hill Parcel. The location of the gas migration trench has been added to Figure 2 of the FOST. References to other documentation on the landfill gas studies were not included in the FOST because the landfill was deemed outside the scope of this FOST. This was due to the lack of impacts to the POL Hill Parcel because it is located outside the landfill boundary. A statement indicating where additional information on the landfill can be found has been added to Section 3.11 of the FOST.</p>

No.	Comments	Responses
		A reference to the 2002 Human Health Risk Assessment (HHRA) has been added to Section 3 of the FOST (Reference # 22) because it is mentioned in the FOST.
9.	<u>Section 3.11, Paragraph 5</u> – The fourth sentence states that the northeasterly portion of the trench is located near the limits of the POL Hill Parcel. However, correlating figures from the Army's 2002 Final Workplan for Installation of Interim Landfill Gas Migration Control Trench with Figure 2 in this FOST shows that the trench lies within the POL Hill Outparcel A1 boundary. Please revise the text accordingly and show the gas migration trench on Figure 2.	The fourth sentence has been corrected to state that the gas migration trench is located within the POL Hill Parcel. The location of the trench has been added to Figure 2.
10.	<u>Section 3.11, Paragraph 6</u> – This paragraph summarizes the Army's December 2002 Human Health Risk Assessment for Volatile Organic Compounds in Soil Gas Near Hamilton Army Airfield Landfill 26 (HHRA) but does not include any mention of the Army's comprehensive Phase I and Phase II investigations in the buffer zone and adjacent Hamilton Meadows residential subdivision. It is recommended that acknowledgment of these investigations and a reference to the Army's HHRA be added to this paragraph and that the HHRA be added to the Section 2 document list.	The paragraph has been modified to include a reference to the Phase I and Phase II soil gas investigations. References to the 2001 work plan and addendum to the work plan for the Phase I and Phase II soil gas investigations have been added to Section 3 of the FOST (Reference # 23 and 24). A reference to the 2002 Human Health Risk Assessment (HHRA) has been added to Section 3 of the FOST (Reference # 22).
11.	<u>Section 3.11, Paragraph 6</u> – In the second sentence, it is recommended that "human health" be inserted before "effects associated with" and that "and the adjacent residential development" be added at the end of the sentence for clarity and accuracy.	The sentence has been reworded to read as follows: The study evaluated the potential for exposures and potential for adverse human health effects associated with the occurrence of VOCs at the site and the adjacent residential development.
12.	<u>Section 3.11, Paragraph 6</u> – It is recommended that the last sentence be revised for clarity to read similar to: "The lack of potentially significant human health risks at Landfill 26 and the adjacent residential development to the south strongly indicates that potential human health risks to recreational users at the POL Hill Outparcel A1 will be even lower and are therefore not a	The sentence has been reworded to read as follows: The lack of potentially significant human health risks at the residential development strongly indicates that there is also a lack of potential human health risks to recreational users at the POL Hill Parcel.

No.	Comments	Responses
	concern.	
13.	<u>Section 3.11, Paragraph 7</u> – Please revise the last sentence of this paragraph according to General Review Comment 1 and Specific Review Comment 1 above.	The phrase “to the City of Novato” has been deleted from the end of the last sentence of Section 3.11, Paragraph 7.
14.	<u>Section 4, Paragraph 2</u> – This paragraph states that the GSA Phase I Residential Cleanup Goal (RCG) for TPH in soils is 200 milligrams per kilogram (mg/kg) which is accurate for TPH quantified as diesel but it is 100 mg/kg for TPH quantified as gas which is believed to be the RCG used for JP4 during the remediation in this parcel. Please confirm and revise this paragraph accordingly. The RCGs were presented in a 1995 Army report prepared by Woodward Clyde Consultants and it is recommended that a reference to this report be added to this paragraph and that the document be added to the Section 2 list.	<p>The paragraph has been revised to include the gasoline RCG.</p> <p>The source of the RCG values, Corrective Action Work Plan, Hamilton Army Airfield, GSA Phase I Sale Area, Revision 1, prepared by Woodward-Clyde Federal Services in 1995 has been added to Section 3 of the FOST as Reference # 23. In addition, the Woodward-Clyde 1995 document, Hamilton Army Airfield GSA Phase I Sale Area Cleanup Goals for Soil and Groundwater was used as a resource for a subsequent CH2M HILL document, dated April 2003, entitled Closure Report POL Hill Outparcel, Hamilton Army Airfield, that is cited as a reference in the FOST (Reference # 11).</p>
15.	<u>Section 4, Paragraph 3</u> – This paragraph states that the GSA Phase I Residential Cleanup Goal (RCG) for TPH in groundwater is 1,200 micrograms per liter (ug/l) which is accurate for TPH quantified as diesel but it is 600 ug/l for TPH quantified as gas which is believed to be the RCG used for JP4 during the remediation in this parcel. Please confirm and revise this paragraph accordingly. These RCGs were presented in a 1995 Army report prepared by Woodward Clyde Consultants and it is recommended that a reference to this report be added to this paragraph and that the document be added to the Section 2 list.	<p>The FOST states that 1,200 ug/l is the combined RCG (for both diesel and JP4) in groundwater. The paragraph has been reworded for clarity. The final RCGs are presented in Closure Report POL Hill Outparcel, Hamilton Army Airfield, dated April 2003, which has been cited as a reference in Paragraph 3 of Section 4 and included as Reference #11 in Section 3 of the FOST.</p> <p>A reference has also been added to Section 3 of the FOST for the Woodward-Clyde document that is cited in the Closure Report.</p>
16.	<u>Section 4, Paragraph 5</u> – The discussion on high and low TPH concentrations is necessary but it is equally if not more important to present the most recent TPH analytical results, especially where the 1,200 ug/l cleanup goal is being exceeded. It is recommended that this information be added to this	The concentrations in groundwater fluctuate. The highest detected levels were in one of the most recent sampling rounds. This phenomenon indicates that maximum concentrations are highly dependent on groundwater elevations.

No.	Comments	Responses
	paragraph.	No change to the FOST has been made.
17.	<u>Section 4, Paragraph 6</u> – It is recommended that the estimated time for the selected remedy of natural attenuation to achieve the groundwater cleanup goals and the groundwater monitoring and reporting frequency be added to this paragraph.	<p>Because of the fluctuation in the maximum concentrations of constituents due to seasonal groundwater elevation changes, it is not possible to estimate the time needed to achieve groundwater cleanup goals.</p> <p>The groundwater monitoring and reporting frequency has not yet been determined by the regulatory agencies. Annual groundwater monitoring has been proposed by the Army.</p> <p>No change to the FOST has been made.</p>
18.	<u>Section 7, Paragraph 1</u> – The Hospital Hill and POL Hill EBS is mentioned in this paragraph. It is recommended that “Environmental Baseline Survey (EBS) replace “EBS”, a reference to it be included to this paragraph and the report added to the Section 2 document list.	Environmental Baseline Survey has been spelled out in Paragraph 1 of Section 7 of the FOST. A reference to the EBS is already included in Section 3 of the FOST (Reference # 2).
19.	<u>Figures 1 and 2</u> – As mentioned in General Comment 2, please revise both figures to include the selected parcel name.	The FOST’s figures have been revised to use the name “POL Hill Parcel.”
20.	<u>Figure 2</u> – As mentioned in Specific Comments 9, please add the gas migration trench to this figure.	The gas migration trench has been added to Figure 2 of the FOST.

A public meeting was held on July 23, 2003. No formal comments were submitted at the public meeting.